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A NUMERICAL CLASSIFICATION OF PHOTOGRAPHY

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LIBRARY SCHOOL

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Introduction

This system of classification is based on the fact that any photographic operation involves four separate considerations:

- (1) The operation is done with a purpose of achieving a certain result and can be considered from the point of view of that result. This will be referred to as the "purpose" of the operation. For example, an operation can be undertaken with a view to obtaining a portrait, or with a view to obtaining an enlargement of some kind, or with a view to obtaining a photographic record or a photomicrograph; all these will be involved in the view of the operation from the point of view of purpose.
- (2) The operation will involve some form of photographic material; it will, indeed, always involve two classes of photographic material; namely, a sensitive material and some apparatus, but since in classification these are almost mutually exclusive, we may consider that we take a portrait, for instance, upon a plate or upon a film, or with a studio camera, or by means of flash-light apparatus. Thus, we have to consider as well as the purpose the "material" that is employed.
- (3) There is involved the operation itself. Thus, in order to obtain a portrait negative (the purpose) by means of a flash-light apparatus (the material) we must conduct a series of operations; we must expose, we must develop, and we must print the negative, and each of these operations will be subdivided, so that we can consider the purpose, the apparatus and the nature of the operation itself.
- (4) Finally, we may perform operations in some cases by any one of several photographic processes. For instance, we may make a print by means of a silver process or by means of a bichromate process, and these again have subdivisions.

We must therefore consider a photographic operation as involving (1) the purpose, (2) the material, (3) the operation itself, and (4) the photographic process.

It may not be necessary to state more than one of these four possibilities in order to classify a given article or patent. A patent for a camera, for instance, merely refers to a material, and the operation to be performed and the purpose of the operation are either obvious or of no importance; so, most photographic operations are performed by means of the gelatino-silver process, and the process may usually be omitted as obvious. In color photography, however, the process is usually the important thing and the operation or purpose is relatively of no importance.

In order to classify completely a photographic operation, therefore, we must be able to use four sets of symbols and we must be able to distinguish whether these symbols refer to purpose, material, operation or process.

The Purpose

In this classification the *purposes* are classified by a series of numbers starting with zero; the prefix of zero to a number, therefore, indicates that the symbol stands for the *purpose* of an operation.

The Material

The materials involved in the operation are referred to by numbers only, and if a compound number is not preceded by zero it refers to a material. Thus, 031 is portraiture; 1213 is flat film; therefore, a reference to the use of flat film for portraiture may be indexed as 031-1213, the order of the symbols indicating the way in which it should be indexed, so that this reference would be indexed under "Portraiture—Use of Flat Film for," whereas if indexed 1213-031 it would be indexed under "Flat Film—Use in Portraiture."

The Operation

The Operation is indicated by a letter followed by a number. The operations are as follows:

A Manufacture of any material or apparatus.

B " support for sensitized material.

C " emulsion for

D Operation of Coating emulsion on support.

E " Packing and finishing a sensitized material for the market.

F "Exposing a material in a camera.

G "Developing a material.

H "Reducing, Intensifying or otherwise chemically finishing a negative.

J " Printing from a negative.

L " Retouching, Working up, Preparing, Spotting, Coloring, etc.

N " "Mounting and Framing a photograph.

Initial M—Machine used for manufacture; e.g., MD11 means a plate coating machine. (M machine, D coating, 11 photographic plates.)

Thus, if we refer to toning bromide prints, print toning is J8 and bromide paper, the material, is 137, so that we can classify this as J8-137, where it is classified under Toning, or as 137-J8, where it is classified under Bromide Prints.

The Process

The *Process* is indicated by a number which is placed in the denominator of a fraction; thus, the making of lantern slides, the obtaining of a lantern slide being the purpose, is 045 and the making of lantern slides by the Albumen process will be 045/65, silver processes being 6 and the Al-

bumen process 65. If no process is indicated, it is taken for granted that the process is the gelatino-silver process. Thus, we see that an operation can be completely expressed by the four sets of symbols, though in practice it is very rarely necessary to index with all four symbols, it usually being necessary to use only one or two; these one or two, however, may belong to any of the four groups.

Additions to the Classification

Many gaps have been left in the numbers, and as new references requiring numbers come to our attention they will be placed in the best position possible and the numbers assigned will be published in the Monthly Abstract Bulletin.

Special Classes

There are a few classes coming under the heading of Purposes for which it is desirable to make special provision.

Color photography is classified as 042, but in view of the constant reference to it this is shortened to the abbreviation K, so that K simply stands for 042 and not for an operation. Thus, KG3 would be the use of time development in color photography, G3 being time development. The specific color processes are represented by K/1, K/2, K/3, K/4 and K/5.

X-ray photography is class 099, but this so frequently occurs that it is shortened to X, X standing for the symbol 099. X-Ray photography involves a class of apparatus which is not used in any other branch of photography and this is classified under Materials as Class 4 of Materials.

Motion photography or cinematography differs in its classification from the rest of photography in that the operations required in it, being special, are classified under its own heading of 06 and not with a separate operation symbol. Thus, negative developing in general is G, but 06 being motion photography, developing motion picture negatives is classified as 0632 without using the G symbol, although appending this would not confuse the classification. Motion picture work also involves a special class of apparatus and this is classified among materials as Class 3, all materials starting with 3 representing apparatus required for motion picture photography, as materials starting with 2 will be materials for ordinary photography and materials starting with 4, materials for X-Ray photography.

Photo-engraving operations are also represented by the number under which photo-engraving is classified and do not use a separate operation symbol. This is done in consequence of the simplicity of the classification of photo-engraving and also in that it requires different operations from those employed in ordinary photography. Photo-engraving is classified under 07, photo-engraving processes being distinguished as 071, 072 and 073, which are in their turn subdivided and the operation shown by a fifth cipher, the operations numbering from 1 to 9.

Use of the Classification

While the numerical classification can be used in connection with any system of references, it is specially designed for use in connection with the Monthly Abstract Bulletin. In the Bulletin each abstract or patent reference which has reference to photography has its classification number appended. If these are cut out and pasted on cards each month (for which two copies of the Bulletin will be required), these cards can be filed in the numerical order of the classification and will form a permanent card index to photographic literature, the labor involved being only that of cutting out and filing the abstracts. If an index to the whole of photography is not required only the required abstracts need be filed; e.g., a file of all abstracts beginning with K will form an index to Color Photography, one of all abstracts beginning with 21 an index to Cameras. As new classes are found necessary they will be inserted and the numbers assigned will be published in the Abstract Bulletin. The following guide cards will be found useful at the start, and intermediate ones may be added from the Classification as may be found necessary:

A	05	131	164	2624	37
В	055	132	165	2626	38
D	056	136	166	2629	K
\mathbf{E}	057	137	167	263	K01
\mathbf{F}	058	14	1674	2631	K02
E F G	06	141	168	264	K04
H	066	1411	169	2645	K05
$_{ m J}^{ m H}$	067	1412	2	265	K06
L	068	1413	21	2653	K07
\mathbf{M}	07	142	2100	2658	K/1
O	07001	1421	2103	266	K/2
01	07005	15	213	2668	K/21
011	071	151	215	267	K/2 K/21 K/3
012	0713	1512	217	27	K/32
013	072 073	1513	218	28	K/4
014	073	1515	22	29	K/43
015	0733	1516	223	3	K/8
016	0734	1517	224	31	K1 K11
017	08	152	23	3100	K11
018	082	153	24	32	K2
019	09	1531	241	3200	K22
02	/61	154	242	3202	K31
023	/9	155	243	3205	X
024		156	25	3208	X01
027	11	157	252	321	X0116
03	12	158	254	322	X12
04	121	159	255	324	X4
044	1211	16	26	33	X42
046	1212	161	262	34	X43
0461	1215	162	2621	35	X44
047	13	163	2623	36	

Operation Symbols

A indicates the manufacture of any article.

E. g., A3 means the manufacture of cinematographic apparatus.

B indicates the manufacture of the support for sensitized material.

E. g., B122 means the manufacture of acetate film support.

C indicates the manufacture of the emulsion of a sensitized material.

E. g., C135 means the manufacture of a printing-out emulsion.

D indicates the operation of coating the emulsion on the support.

E indicates the packing and finishing of a sensitized material for the market.

E. g., E1211 means the spooling of roll film.

F	2	J8	Print Toning.
F1	Composing and Focusing.	J81	Toning by Metals. (Gold,
F2	Camera Loading with Ma-		Platinum, etc.)
	terial.	J82	Toning by Metallic Salts; e.g.
F 3	Use of Special Lenses.		Ferrocyanides.
F4	Use of Special Shutters.	J83	Toning by Various Forms of
F5	Determination of Exposure.		Silver Deposits.
F 6	Making the Exposure.	J8 4	Toning by Sulphur, Selenium, Tellurium Compounds.
G Indi	cates Developing, etc.	J87	Toning by Colored Oxidation
G1	Compounding Solutions.		Products.
G2	Tentative Development.	J88	Toning by Dye Deposition.
G3	Time Development.	$\mathbf{J}9$	Print Drying.
G4	Stand Development.		
G5	Other Special Methods of De-		ates Working Up, etc.
	velopment.	L1	Retouching.
G6	Fixing.	L2	Blocking Out and Working
G7	Washing.	T 0	Up Negatives.
G8	Reversing Negative to Posi-	L3	Spotting.
	tive.	L4	Working Up Prints.
G9	Making Duplicate Negatives.	L5	Coloring.
		L6	Surfacing, Glazing, Varnish-
	icates After Treatment of Negative.	~ 	ing, etc., Prints.
H1	Reducing.	L7	Restoring Faded Prints.
H2	Intensifying.	N	
H3	Drying.	N1	Mounting.
H4	Stripping.	N2	
H5	Varnishing.	N3	
H 6	Titling.	N4	
J Indie	cates Printing.	N_5	Framing.
J1	Daylight Printing.		
J2	Printing Out by Artificial Light	P	Recovery of Wastes and
J3	Developing Out Printing.		Economies.
J4	Developing and Fixing Prints.	P1	Recovery of Silver Wastes.
J 5		P2	Recovery of Gold and Platinum
J 6	Print Washing.		Wastes.
J7		P5	Recovery of Chemicals.

Purpose Symbols

01	The Theory of Photography.	019	Photographic Optics.
011	Photo-Electricity.		
012	Photo-Sensitive Materials.	02	Amateur Photography.
013	Theory of Printing Out Images.	021	Landscape Work.
014	Latent Image and Theory of	022	Portrait and Figure Work.
	Exposure, Resolving Power.	023	Indoor Work.
015	H. & D. Theory and Sensitive-	024	Hand Camera Work.
	ness of Materials.	025	Photographic Art.
016	Practical Sensitometry.		
017	Theory of Development	03	Professional Photography.
018	Color Sensitiveness.	031	Portraiture.

0311	Studio Design and Business;	063	Taking.
	e. g., "Design of Portrait	0631	Camera Work.
	Studios."	0632	Developing.
	"Card Filing Systems for	0633	Fixing.
	Portrait Photographers.''	0634	After Processes.
0312		0635	Washing.
-	ments and Work.	0636	Drying.
0313		064	Positive Making.
0314		0641	Perforating.
001	1 oping und ingiting.	0642	Printing.
032	Commercial Photography.	0643	Developing.
033	Press Photography.	0644	Fixing.
0335		0645	Toning and Tinting.
034	"Moving" Portraits.	0646	Washing.
001	nothig 1 orthus	0647	Drying.
04 P	hotographic Operations Con-		
-	sidered in Light of the Re-	0648	Stenciling and Coloring.
	sult Produced.	0649	Titling and Assembling,
041	Defects.	0.05	Varnishing, Cleaning, etc.
041	Color Photography. (K)	065	Film Sale and Hire Arrange-
J12	(See Page 14)		ments.
043	Stereoscopic Photography.	066	Theatre Arrangements.
044	Photo-Sculpture.	067	Projecting.
045	Lantern Slide Making.	068	Stereo Cinematography.
046	Enlarging.	0 69	Combination Cine and Phono-
047	Photographic Enamels.		graphic Methods.
	Photographic Decorations.		
048		07 Ph	oto-Engraving.
049	Transparencies.		Preparation of the Original.
05 D	La complia Openationa Installa		Camera Operation.
05 P	hotographic Operations Involv-		B Dark Room Operations.
	ing Special Apparatus or Con-		Preparation of the Printing
	ditions.	0.00	Surface.
051	Wide Angle and Panoramic		
		07005	Transference of the Image to
	Work.	07005	Transference of the Image to
052	Telephoto Work.		the Printing Surface.
053	Telephoto Work. Architectural Work.	07006	the Printing Surface. Etching.
	Telephoto Work.	07006 07007	the Printing Surface. Etching. Re-Etching and Finishing.
053	Telephoto Work. Architectural Work. High Speed Photography.	07006 07007 07008	the Printing Surface. Etching. Re-Etching and Finishing. Routing and Mounting.
053 054	Telephoto Work. Architectural Work.	07006 07007 07008 07008	the Printing Surface. Etching. Re-Etching and Finishing. Routing and Mounting. Proving and Printing.
053 054 055 056	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials.	07006 07007 07008 07008	the Printing Surface. Etching. Re-Etching and Finishing. Routing and Mounting.
053 054 055	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photo-	07006 07007 07008 07008	the Printing Surface. Etching. Re-Etching and Finishing. Routing and Mounting. Proving and Printing.
053 054 055 056	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography.	07006 07007 07008 07008	the Printing Surface. Etching. Re-Etching and Finishing. Routing and Mounting. Proving and Printing. taglio Processes. Bitumen and Early Processes.
053 054 055 056	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photo-	07006 07007 07008 07009 071 Int	the Printing Surface. Etching. Re-Etching and Finishing. Routing and Mounting. Proving and Printing. taglio Processes. Bitumen and Early Processes. Hand Photogravure.
053 054 055 056 056	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography.	07006 07007 07008 07009 071 Int 0711 0712 0713	the Printing Surface. 3 Etching. 3 Re-Etching and Finishing. 3 Routing and Mounting. 4 Proving and Printing. 4 Eaglio Processes. 4 Bitumen and Early Processes. 4 Hand Photogravure. 5 Machine Photogravure.
053 054 055 056 056 0565	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography. Copying.	07006 07007 07008 07009 071 Int 0711 0712 0713	the Printing Surface. Etching. Re-Etching and Finishing. Routing and Mounting. Proving and Printing. Raglio Processes. Bitumen and Early Processes. Hand Photogravure.
053 054 055 056 056 056 057 058	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography. Copying. Artificial Light Photography.	07006 07007 07008 07008 0711 0711 0712 0713 0714	the Printing Surface. 3 Etching. 3 Re-Etching and Finishing. 3 Routing and Mounting. 4 Proving and Printing. 4 Laglio Processes. 5 Bitumen and Early Processes. 6 Hand Photogravure. 6 Machine Photogravure. 7 Steel Engraving. 7 Intaglio Half-Tone.
053 054 055 056 056 056 057 058 058	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography. Copying. Artificial Light Photography. Flash-Light Work.	07006 07007 07008 07009 071 Int 0711 0712 0713 0714 0715	the Printing Surface. 3 Etching. 3 Re-Etching and Finishing. 3 Routing and Mounting. 4 Proving and Printing. 4 Eaglio Processes. 4 Bitumen and Early Processes. 4 Hand Photogravure. 5 Machine Photogravure. 5 Steel Engraving.
053 054 055 056 056 056 057 058 058 058	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography. Copying. Artificial Light Photography. Flash-Light Work. "Night Photography."	07006 07007 07008 07009 071 Int 0711 0712 0713 0714 0715	the Printing Surface. 3 Etching. 3 Re-Etching and Finishing. 3 Routing and Mounting. 4 Proving and Printing. 4 Eaglio Processes. 5 Bitumen and Early Processes. 6 Hand Photogravure. 6 Machine Photogravure. 7 Steel Engraving. 7 Intaglio Half-Tone. 7 Woodburytype.
053 054 055 056 056 056 057 058 058	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography. Copying. Artificial Light Photography. Flash-Light Work. "Night Photography." Portraiture by Artificial	07006 07007 07008 07008 0711 0711 0712 0713 0714 0715 0716	the Printing Surface. 3 Etching. 3 Re-Etching and Finishing. 3 Routing and Mounting. 4 Proving and Printing. 5 Etching. 5 Re-Etching and Finishing. 6 Proving and Printing. 5 Etching and Printing. 6 Etching Processes. 6 Bitumen and Early Processes. 7 Hand Photogravure. 7 Machine Photogravure. 7 Steel Engraving. 7 Intaglio Half-Tone. 7 Woodburytype. 7 Stage Processes.
053 054 055 056 056 056 057 058 058 058	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography. Copying. Artificial Light Photography. Flash-Light Work. "Night Photography."	07006 07007 07008 07009 071 Int 0711 0712 0713 0714 0715 0716	the Printing Surface. 3 Etching. 3 Re-Etching and Finishing. 3 Routing and Mounting. 4 Proving and Printing. 5 Etching. 5 Routing and Mounting. 6 Proving and Printing. 5 Etching and Printing. 6 Etching and Printing. 6 Etching and Early Processes. 6 Hand Photogravure. 6 Machine Photogravure. 6 Steel Engraving. 6 Intaglio Half-Tone. 6 Woodburytype. 6 Frace Processes. 6 Lithography.
053 054 055 056 056 056 057 058 058 058:	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography. Copying. Artificial Light Photography. Flash-Light Work. "Night Photography." Portraiture by Artificial Light.	07006 07007 07008 07009 071 Int 0711 0712 0713 0714 0715 0716 072 Su 0721 0722	the Printing Surface. 3 Etching. 3 Re-Etching and Finishing. 3 Routing and Mounting. 4 Proving and Printing. 5 Laglio Processes. Bitumen and Early Processes. Hand Photogravure. Machine Photogravure. Steel Engraving. Intaglio Half-Tone. Woodburytype. rface Processes. Lithography. Photolithography.
053 054 055 056 056 056 057 058 058 058:	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography. Copying. Artificial Light Photography. Flash-Light Work. 'Night Photography.'' Portraiture by Artificial Light. Intion Photography.	07006 07007 07008 07009 071 Int 0711 0712 0713 0714 0715 0716 072 Su 0721 0722 0723	the Printing Surface. Etching. Re-Etching and Finishing. Routing and Mounting. Proving and Printing. Raglio Processes. Bitumen and Early Processes. Hand Photogravure. Machine Photogravure. Steel Engraving. Intaglio Half-Tone. Woodburytype. rface Processes. Lithography. Photolithography. Offset.
053 054 055 056 056 056 057 058 058 058 061	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography. Copying. Artificial Light Photography. Flash-Light Work. 'Night Photography.'' Portraiture by Artificial Light. Iotion Photography. Studio Arrangements.	07006 07007 07008 07009 0711 0711 0712 0713 0714 0715 0716 072 Su 0721 0722 0723 0724	the Printing Surface. Etching. Re-Etching and Finishing. Routing and Mounting. Proving and Printing. Raglio Processes. Bitumen and Early Processes. Hand Photogravure. Machine Photogravure. Steel Engraving. Intaglio Half-Tone. Woodburytype. rface Processes. Lithography. Photolithography. Offset. Collotype.
053 054 055 056 056 056 057 058 058 058:	Telephoto Work. Architectural Work. High Speed Photography. Photography with Color Sensitive Materials. Orthochromatic Photography. Color Contrast Photography. Copying. Artificial Light Photography. Flash-Light Work. 'Night Photography.'' Portraiture by Artificial Light. Intion Photography.	07006 07007 07008 07009 071 Int 0711 0712 0713 0714 0715 0716 072 Su 0721 0722 0723	the Printing Surface. 3 Etching. 3 Re-Etching and Finishing. 3 Routing and Mounting. 4 Proving and Printing. 5 Laglio Processes. Bitumen and Early Processes. Hand Photogravure. Machine Photogravure. Steel Engraving. Intaglio Half-Tone. Woodburytype. rface Processes. Lithography. Photolithography. Offset. Collotype. Decalcomanie.

073	Relief Processes.	092	Position Recording Methods.
0	731 Wood Engraving.	093	Photographic Photometry.
0	732 Line Etching.	094	Photomicrography.
0	733 Half-Tone. (Screen)	0941	Very Low Power Work.
0	734 Half-Tone. (Grain)	0942	Sections.
0	735 Electrotyping.	0943	Dark Field Illumination.
		0944	Bacteria.
074	Mixed Processes.	0945	Metallography.
08	Applied Photography.	0947	Microphotography.
081	Documentary Photography.	095	Spectrography.
082	Legal and Criminal Photo-	096	Astronomical Photography.
002	graphy.	0961	Astrographic Determina-
083	Military Photography.		tions.
084	Photographic Surveying.	0962	Stellar Spectroscopy.
085	Record Photography.	0963	Heliography.
086	Photographic Recording,	0964	Spectroheliography.
	(Meter Reading, etc.)	0965	Radial Velocity Determina-
087	Phototelegraphy.		tions.
088	"Spirit Photography."	097	Medical and Surgical Photo-
089	Miscellaneous Applied Photo-		graphy.
	graphy.	098	Nature Photography.
09	Scientific Photography.	099	Roentgen Photography. (X)
091	Curve Recording Methods.		(See Page 15)

Process Symbols

/6	Silver Processes.	/74	Kallitype.
/61	Daguerreotype.	/75	Platinum Silver.
/62 /63 /64	Sensitized Paper Processes (Calotype, etc.) Wet Collodion. Collodion Emulsion.	/8 /81	Bichromate Processes. Chromate Alone or with Other Metals.
/65	Albumen Processes.	/82	Carbon.
/66	Gelatino-Bromide Emulsion.	/83	Ozotype.
/67	Unwashed Emulsions for De-	/84	Ozobrome.
,,,	velopment.	/85	Pinatype.
/68	Printing Out Silver Processes.	/86	Fish Glue.
/00 111	Timing Out briver Trocesses.	/87	Powder.
/7	Iron Processes.	/88	Gum Bichromate.
//71	Blue Print.	/89	Oil, Bromoil and Oil Transfer.
/72 /73	Iron Gallate. Platinum.	/9	Processes Involving Other Light Sensitive Substances.

Material Symbols

1 Materials.		114	Panchromatic.	
11	Sensitized Dry Plates.	115	Non-Halation.	
111	Ordinary.	116	X-ray.	
112	Lantern.	117	Ferrotype.	
113	Orthochromatic.	118	Process.	

1511 Acids. Sensitized Film. 12 1512 Cellulose Nitrate. 121 Nitrate Film. 1513 Cellulose Acetate and Other 1211 Roll Film. Fatty Esters. 1212 Cine Film. 1514 Other Cellulose Derivatives. 1213 Flat Film. 1515 Viscose. 1214 X-Ray Film. 1215 Film Packs. 1516 Solvents. 1517 Fillers. 122 Acetate Film. 1518 Stabilizers. Viscose Film. 123 Other Cellulose Product Film. 152 Used in Making Emulsions. 124 Cellulose Formate. 1521 Silver Salts. 125 1522 Bromides. 126 Gelatine Base Film. 1523 Chlorides. 127 Stripping Film on Paper. 1524 Iodides. 1525 Added Chemicals. Sensitized Printing Papers. 13 1526 Hardeners. Iron Processes. 131 1527 Preservatives. 1311 Platinum Paper. 1528 Coating Additions. 1312 Iron Silver. Developing Chemicals. 153 1313 Ferroprussiate. 1531 Reducing Agents. Bichromate Processes. 132 1321 Carbon. 15311 Iron Salts. 1322 Pinatype. 15312 Other Inorganic Developing 1323 Ozobrome. Agents. 1324 Fish Glue. 15313 Phenols. 133 Albumen Paper. 15314 Amino Phenols. 134 Collodion Paper. 15315 Di- and Triamines. Printing Out Papers. 135 15316 Reducing Agents Giving 1355 Self-Toning Printing Out Colored Oxidation Products Papers. (e. g. Indoxyl). 136 Gaslight Developing Out Papers. 1532 Preservatives. Bromide. 137 1533 Accelerators. 1373 Photostat. 1534 Restrainers. 1375 Transfer Bromide. 154 Fixing & Hardening Chemicals. Bleach Out Paper. 138 1541 Fixing Chemicals. 1542 Preservatives for Fixing Bath. 14 Raw Materials. 1543 Hardeners. Support Materials. 141 1544 Stain Removers. 1411 Cotton and Wood Pulp. 155 Intensifying and Reducing 1412 Paper (Photographic). Chemicals. 1413 Glass. 1551 Intensifiers. 1414 Barvta. 1555 Reducers. Emulsion Materials. 142 156 Toning Chemicals. 1421 Gelatine. 1561 Bleaching Chemicals. 1422 Casein. 1562 Metallic Compounds of Base 1423 Collodion. Metals. 1424 Albumen. 1563 Redeveloping Chemicals. Packing Materials. 143 Chemicals for POP Toning 1565 1431 Paper (Packing). Baths. 1432 Millboard. 157 1433 Tinfoil. 1571 Bichromates. 1572 Gums. 1573 Albumen. 15 Chemicals. 1574 Fish Glue. Used in Making Film Base. 151

1575 Metagelatine.	ganate, etc.)
1576 Iron Salts.	1657 Flattening Reducers (Persul-
1579 Platinum and Platinum Salts.	phate, etc.)
158 Dyes.	166 Toning Solutions.
1581 Sensitizers.	1661 Bleaching Baths.
1582 Filter Dyes.	1662 Metallic Toning Baths (Base
1583 Pinatype Dyes.	Metals).
1584 Spirit Soluble Dyes.	1663 Sulphiding Baths.
159 Sundry Chemicals.	1665 POP Toning Baths.
1592 Flash-Light Powders.	167 Bichromate Solutions.
	1671 Bichromate Sensitizers.
16 Photographic Solutions.	1672 Ozotype Solutions.
161 Film Base Solutions (Dopes).	1673 Ozobrome ''
1612 Nitrate Dope.	1674 Bromoil "
1613 Acetate Dope.	168 Dye Solutions.
162 Emulsions.	1681 Dye Sensitizing Baths.
163 Developing Solutions.	169 Varnishes and Pastes.
164 Fixing Solutions.	1691 Negative Varnishes.
165 Intensifiers and Reducers	1692 Retouching Varnishes.
1651 Mercury Intensifiers.	1693 Cellulose Varnishes.
1652 Silver "	1695 Starch Pastes.
1653 Chromium "	1696 Dextrin Pastes.
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K

Color Photography

K is used as a prefix to any of the classes of photography in place of 042 and signifies that the class so designated is considered as applicable to color photography. Thus, we get the following specially applicable numbers:

042 (K)	General Color Photography.
K01	Theory of Color Photography.
K02	Amateur Work in Color Photog-
	raphy.
K031	Color Portraiture.
K043	Stereoscopic Color Photography.
K058	Use of Artificial Light in Color
	Photography.
K06	Color Cinematography.
K062	The Design of Stages, etc., for
	Color Cinematography.

K067 Color Cine Projection.K08 Applied Color Photography.

K09 Color Applied to Scientific Photography.

K094 Color Photomicrographs.

Processes of Color Photography.

K/1 Interference Processes.

K/2 Additive Processes.

K/21 Additive Projection in Triple Lantern.

K/22 Subjective Additive Processes (Kromskop).

K/23 Cinema Additive Projection Simultaneously.

K/24 Cinema Additive Projection by Persistence of Vision.

K/3 Screen Unit Processes.

K/31 Regular Line.

K/32 Regular Dot or Pattern.

K/33 Irregular Grain.

K/34 Cinema Screen Unit Processes.

K/35 Screen Unit Paper Processes.

K/37 Methods of Registering Screen Unit Plates.

K/4 Subtractive Processes.

K/41 Superposed Transparencies.

K/42 Superposed Films on Opaque Support (Paper).

K/43 Subtractive Cinema Processes.

K/44 Multiple Color Prints Contained in One Layer (e.g., Imbibition Processes).

K/45 Subtractive Prints from Screen Plates.

K/5

K/51 Lippmann Process.

K/52 Direct (Seebeck) Process.

K/53 Heliochrome Dispersion Process.

K/56 Multicolor Methods.

K/6 Silver Processes in Color Photography.

K/64 Collodion Emulsion Processes of Color Photography.

K/7 Iron Processes of Color PhotographyK/8 Bichromate Processes of Color Photography.

K/83 Color Carbon Methods.

K/84 Color Ozobrome Methods.

K/85 Pinatype Methods.

K/9 Other Light Sensitive Materials.

K/93 Bleach-out Process.

K/94 Pinachromy.

K/95 Primuline Methods.

K1 Materials for Color Photography.

K114 Panchromatic Plates.

K1212 Panchromatic Cine Film.

K1321 Carbon Tissue for Color Work.

K1322 Pinatype Plates.

K138 Bleach Out Paper. K158 Dyesfor Color Photography.

K1583 Pinatype Dyes.

K1673 Ozobrome Bleaching Baths.

K2 Apparatus for Color Work.

K21 Color Cameras.

K211 Studio Cameras.

K2114 Sliding Back Cameras.

K2115 Moving Mirror Cameras.

K2116 One Exposure Mirror Cameras.

K2117 Prism Cameras.

K213 Hand Cameras (Plate) for Color Work.

K218 Color Stereoscopic Cameras.

K22 Color Projectors.

K225 Kromskops.

K263 Lenses for Color Work.

K266 Filters for Color Work.

K2664 Compensating Filters.

K2665 Color Taking Filters.

K2666 Color Projection Filters.

K3 Apparatus for Color Cinematography

K31 Cine Color Cameras.

K32 Cine Color Projectors.

K363 Cine Lenses for Color Work.

\mathbf{X}

Radiography

X is used as a prefix to any of the classes of photography in place of 099 to indicate that the class so designated is considered as applied to Radiography. Thus, we get:—

099 (X) Radiographic Photography.	X416 Tubes.
XF6 X-Ray Exposing.	X417 Tube Stands.
XG X-Ray Developing.	X42 Apparatus for the Use of X-Rays.
X01 Theory of Action of X-Rays on	X421 Protective Shields, etc.
Sensitive Materials.	X422 X-Ray Couches.
X043 Stereoscopic Radiography.	X423 Plate and Film Holders.
X06 X-Ray Cinematography.	X424 Intensifying Screens.
X097 X-Rays in Surgery and Medicine	X425 Fluoroscopes and Fluorescent
X0971 Localizing Foreign Bodies.	Screens.
X0972 Examination of Fractures.	X43 Apparatus for the Measurement
X0973 General Diagnosis of Pathologi-	of X-Rays.
cal Conditions.	X431 Current Measuring Instru-
X0974 X-Ray Treatment.	ments.
X116 X-Ray Plates.	X432 Potential Measuring Instru-
X12 X-Ray Film.	ments.
X13 X-Ray Paper.	X433 Hardness Measuring Instru-
X4 X-Ray Apparatus and Sundries.	ments.
X41 Apparatus for the Generation of	X434 Quantity Measuring Instru-
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X411 Transformers.	X435 X-Ray Spectrometers.
X412 Static Machines.	X44 Sundry Apparatus.
X413 Induction Coils.	X441 X-Ray Negative Illuminators.
X414 Interrupters.	X442 X-Ray Stereoscopes.
X415 High Tension Rectifiers.	X443 X-Ray Localizing Devices.



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